



US 20210252008A1

(19) **United States**(12) **Patent Application Publication**
HANGAUER, JR.(10) **Pub. No.: US 2021/0252008 A1**(43) **Pub. Date: Aug. 19, 2021**(54) **BIARYL COMPOSITIONS AND METHODS
FOR MODULATING A KINASE CASCADE**(71) Applicant: **Athenex, Inc.**, Buffalo, NY (US)(72) Inventor: **David G. HANGAUER, JR.**, Sarasota,
FL (US)(21) Appl. No.: **17/151,835**(22) Filed: **Jan. 19, 2021****Related U.S. Application Data**

(63) Continuation of application No. 16/893,469, filed on Jun. 5, 2020, now abandoned, which is a continuation of application No. 16/655,309, filed on Oct. 17, 2019, now abandoned, which is a continuation of application No. 16/295,018, filed on Mar. 7, 2019, now abandoned, which is a continuation of application No. 15/408,098, filed on Jan. 17, 2017, now abandoned, which is a continuation of application No. 14/094,027, filed on Dec. 2, 2013, now Pat. No. 9,580,387, which is a continuation of application No. 13/540,940, filed on Jul. 3, 2012, now Pat. No. 8,598,169, which is a continuation of application No. 13/152,949, filed on Jun. 3, 2011, now Pat. No. 8,236,799, which is a continuation of application No. 11/480,174, filed on Jun. 29, 2006, now Pat. No. 7,968,574, which is a continuation-in-part of application No. 11/321,419, filed on Dec. 28, 2005, now Pat. No. 7,300,931.

(60) Provisional application No. 60/727,341, filed on Oct. 17, 2005, provisional application No. 60/704,551, filed on Aug. 1, 2005, provisional application No. 60/639,834, filed on Dec. 28, 2004.

Publication Classification(51) **Int. Cl.**

<i>A61K 31/5377</i>	(2006.01)
<i>C07C 233/13</i>	(2006.01)
<i>C07D 239/26</i>	(2006.01)
<i>C07D 239/34</i>	(2006.01)
<i>C07D 401/12</i>	(2006.01)
<i>C07D 403/04</i>	(2006.01)
<i>C07D 213/56</i>	(2006.01)
<i>C07D 213/89</i>	(2006.01)
<i>A61K 9/00</i>	(2006.01)
<i>A61K 31/495</i>	(2006.01)

(52) **U.S. Cl.**

CPC *A61K 31/5377* (2013.01); *C07C 233/13* (2013.01); *C07D 239/26* (2013.01); *C07D 239/34* (2013.01); *C07D 401/12* (2013.01); *C07C 233/22* (2013.01); *C07D 213/56* (2013.01); *C07D 213/89* (2013.01); *A61K 9/0053* (2013.01); *A61K 31/495* (2013.01); *C07D 403/04* (2013.01)

(57)

ABSTRACT

The invention relates to compounds and methods for modulating one or more components of a kinase cascade.